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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,253	08/22/2006	Bernardus Van Dieren	P30150	1856
7055 7590 07/09/2010 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER SPURLOCK, BRETT SHANE				
ART UNIT 3742		PAPER NUMBER		
NOTIFICATION DATE 07/09/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
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### Office Action Summary

**Application No.**

10/598,253

**Applicant(s)**

VAN DIEREN ET AL.

**Examiner**

BRETT SPURLOCK

**Art Unit**

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 30-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_
- Paper No(s)/Mail Date 3/9/2007

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 38-39 and 55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The usage of the phrase "when viewed from above" in claim 38 and "when viewed from above in a displacement direction" as found in claim 55 is vague and indefinite because "from above" is not tied to any structure. Furthermore, the phrase "from above in a displacement direction" is not understood and fails to limit the claim. The examiner respectfully recommends amending the claims so that the respective elements are described relative to other claimed physical elements of the device in accordance with what is shown in the drawings.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 30 – 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hammer (US 0012204 A). Hammer discloses a steeping device for hops wherein a container (A) structured and arranged for steeping barley having a floor (d), passageways (e) (see col. 1, lines 47-48) arranged in the floor for at least one of

steeping water and gases to pass through via a water line system (B, d, e and "vent cock" as described in col. 3, lines 10-25) located under the floor and directly connected to the passageways which supplies water to the container (f) (see col. 3, lines 10-17); the passageways include sieves (col. 1, line 43) located on the passageway which extends out radially from the base (Fig. 1; e, f and g).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer (US 0012204 A) in view of Sauvage et al (US 5282413 A). Hammer discloses the claimed invention including a round container except for the passageways that are arranged in radially oriented rows. Sauvage discloses passageways that are arranged in radially oriented rows (Fig. 4-5; 12) and, as shown, one is located at a variable position relative to the next one. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the passageways disclosed by Hammer to be arranged in rows as disclosed by Sauvage to allow for uniform material transport.

7. Claims 36-39, 48-57 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer (US 0012204 A) in view of Schultz (US 3730845 A). Hammer discloses the claimed invention but does not explicitly disclose that the device

comprises a shared water line element; and water branch line elements arranged to couple the passageways to the shared water line elements; a water line main element, wherein the shared water line elements are connected to the water main line element. Schultz discloses a shared water line (25) element; and water branch line elements (3) arranged to couple the passageways (28) to the shared water line elements; a water line main element (1), wherein the shared water line elements are connected to the water main line element and oriented between two adjacent, radially oriented rows of passageways when viewed from above (28 as shown in Fig. 3 and 5); a reservoir (col. 5, lines 61-69) for cleaning agents and a cleaning agent valve (23) connecting the reservoir with the water line system to supply cleaning agent (i.e. to use water and the water line system for cleaning) to the water line system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modernize the multiple passageways disclosed by Hammer (see col. 1, lines 47-50) by incorporating a shared, branch and main water line elements as well as a cleaning system as disclosed by Schultz for efficient introduction and evacuation of seeping water and the ability to systematically clean the device.

Furthermore, with respect to the more elaborate and modern components of the air line system that are connected under the floor, Schultz discloses an air line system (col. 4, lines 13-45) connected under the floor to the passageways (Fig. 1-2; 28) for passing air to the container (Fig. 1 and col. 4, lines 1-2) wherein the air line system further comprises shared air line elements (Fig. 3; 6); and air branch line elements (3 and/or 5) arranged to couple the passageways to the shared air line elements along

with the air branch line elements both of which are located under the floor (Fig. 1-2); a air main line element (Fig. 3; 12), wherein the shared air line elements are connected to the air main line element; air valves (15, 16) between the shared air line elements and the air main line element; a control system (Fig. 1 bottom up flow and Fig. 2 shows top down flow indicating a flow control system) controlling individual or group operation of the air valves (col. 4, lines 64-75); an air line system under the floor which contains a scraper body (col. 5, line 49), positionable near an upper side of the container (col. 5, line 49-50), structured and arranged to shift (col. 5, lines 59-69) direction over the surface of the water in a displacement direction along a surface of the water (col. 5, lines 33-37) to one of scrape and collect elements circulating on a surface of the water; as the scraper body shifts in a displacement direction along the surface of the water, the control system opens at least one of the air valves (col. 5, lines 40-43) directly preceding a front side of the scraper body when viewed from above in the displacement direction; exhaust (11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modernize the air system disclosed by Hammer by incorporating shared, main and branch air line elements which are attached and coupled to the passageways leading to the container and regulated by air valves in order to uniformly control the air ratio and quantity and a scraper system that can be raised or lowered to reach the water level as disclosed by Schultz.

8. Furthermore, with respect to claims 56 and 57, Schultz discloses that the floor is permeable and that the air pressure will vary depending on the space between the bottom of the floor (2) and the bottom of the box (1) but does not disclose that it

makes up 5% or 3% of the total floor. It would have been obvious to one of ordinary skill in the art at the time the invention for the gas-permeable surface to have occupied 3% or 5% of the total floor surface in order to optimize the flow profile under the floor. Claims 41 – 47, 60 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer (US 0012204 A) in view of Schultz (US 3730845 A), Deblois et al (US 20050037452 A1) and Numberger (US 4048019 A). Hammer discloses the claimed device including a gas that enters and leaves (page 2, lines 50-70) the device via a vent cock (col. 3, line 11) (also see col. 3, lines 95-110). But Hammer does not disclose that the gas extracted is CO<sub>2</sub> or that the system is placed under the floor of the device. Schultz discloses a (shared) line system (14) being connected directly to the passageways (Fig. 3) and branch line elements (16) in conjunction with the main line (Fig. 1-2; 23) and that it is desirable to control the CO<sub>2</sub> level in the device (col. 2, lines 64-70); exhaust (11). Schultz does not explicitly disclose that the air system is located under the floor being connected directly to the passageways or that specifically CO<sub>2</sub> should be removed. Deblois discloses that the gas removal system (Fig. 1; 34) is located under the floor of the device. Numberger discloses that CO<sub>2</sub> should be removed (col. 3, lines 1-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hammer to have a shared gas removal system which connects to the branch line elements and passageways as disclosed by Schultz to extract CO<sub>2</sub> to control the germination process as disclosed by Numberger and to do so through the bottom of the device as disclosed by Deblois to ensure that the gas passes through the desired areas.

9. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Hammer (US 0012204 A) in view of Schultz (US 3730845 A), Deblois et al (US 20050037452 A1), Numberger (US 4048019 A) as applied to claim 41 and further in view of Sauvage et al (US 5282413 A). Hammer in view of Schultz, Deblois, and Numberger discloses the claimed invention but does not disclose that the water and CO<sub>2</sub> line systems are graduated. Sauvage discloses that the water (col. 1, lines 35-40) and CO<sub>2</sub> line (col. 2, lines 25-42) systems are graduated. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt Hammer, as modified by Schultz, Deblois, and Numberger, to graduate the CO<sub>2</sub> and water line flow rates to optimally reduce the consumption of water.

10. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer (US 0012204 A) in view of Schultz (US 3730845 A) and Sauvage et al (US 5282413 A). Hammer shows the device claimed except that the water and air line systems are graduated. Schultz discloses that the air line loading is closely controlled (col. 2, lines 6-15) which results in an ability to control the water level and Sauvage discloses that the water (col. 1, lines 35-40) system is graduated. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt Hammer in view of Schultz and Sauvage to graduate the air and water line flow rates to reduce the consumption of water.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRETT SPURLOCK whose telephone number is (571)270-1387. The examiner can normally be reached on M-TH, M-F, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 5712724780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRETT SPURLOCK/  
Examiner, Art Unit 3742

6/30/2010

/SANG Y PAIK/  
Primary Examiner, Art Unit 3742